

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently amended) A computer-implemented method for managing respective sessions between mobile communication devices and an application program hosted on a data processing system with a gateway module that is coupled to the mobile communications devices and to the application program, comprising:

generating at the gateway module respective first session identifiers upon receipt of initial requests from the mobile communication devices at the gateway module and transmitting the first session identifiers to the application program;

associating the first session identifiers with corresponding second session identifiers from the application program at the gateway module, wherein respective connections are established between the mobile communications devices and the application program; and

in response to each subsequent communication~~[[s]]~~ from ~~[[the]]~~ each mobile device~~[[s]]~~ to the application program via the connection between the mobile device and the application program while the ~~respective connection~~~~[[s]]~~ ~~between the mobile devices to the application program~~ is established and ~~for communications within the respective sessions~~, transmitting from the gateway module to the application program the second session identifier~~[[s]]~~ that ~~[[are]]~~ is associated with the first session identifier~~[[s]]~~ of the mobile device~~[[s]]~~ of the subsequent communication~~[[s]]~~.

2. (Original) The method of claim 1, further comprising:

receiving requests of a first type from the mobile devices at the gateway module and transferring the first type requests to an authentication module that manages user authentication; and

when a user at a mobile device has not logged-in to the authentication module, transmitting a log-in prompt from the authentication module to the mobile device in response to a request of the first type from the mobile device.

3. (Original) The method of claim 2, further comprising generating at the authentication module respective authentication identifiers for the first session identifiers and associating the authentication identifiers with corresponding first session identifiers.

4. (Currently amended) An apparatus for managing respective sessions between mobile communication devices and an application program hosted on a data processing system, comprising:

means for generating respective first session identifiers upon receipt of initial requests from the mobile communication devices and transmitting the first session identifiers to the application program;

means for associating the first session identifiers with corresponding second session identifiers from the application program, wherein respective connections are established between the mobile communications devices and the application program; and

means for transmitting the second session identifier[[s]] that is [[are]] associated with the first session identifier[[s]] of [[the]] each mobile device[[s]] to the application program via the connection between the mobile device and the application program in response to and in association with each subsequent communication[[s]] from the mobile device[[s]] directed to the application program while the [[respective]] connection[[s]] between the mobile device[[s]] to the application program [[are]] is established ~~and for communications within the respective sessions.~~

5. (Currently amended) A computer-implemented method for managing respective shopping sessions between wireless communication devices and a merchant application with a gateway module that is coupled to the mobile communications devices and to the merchant application, comprising:

generating at the gateway module respective wireless session identifiers upon receipt of initial requests from the wireless communication devices at the gateway module and transmitting the wireless session identifiers to the merchant application;

generating at the merchant application respective merchant session identifiers for the wireless session identifiers and transmitting the merchant session identifiers to the gateway module;

associating the wireless session identifiers with corresponding merchant session identifiers at the gateway module, wherein respective connections are established between the mobile communications devices and the merchant application; and

in response to each subsequent communication[[s]] from ~~[[the]]~~ each mobile device[[s]] to the merchant application via the connection between the mobile device and the application program while the ~~respective connection[[s]] between the mobile devices to the merchant application are~~ is established ~~and for communications within the respective sessions,~~ transmitting from the gateway module to the merchant application the merchant session identifier[[s]] that is ~~[[are]]~~ associated with the wireless session identifier[[s]] of the mobile device[[s]] of the subsequent communication[[s]].

6. (original) The method of claim 5, further comprising:

receiving checkout requests from the wireless communication devices at the gateway module and transferring the checkout requests to a wallet module that manages user authentication;

when a user at a wireless communications device has logged-in to the wallet module, transmitting payment options from the wallet module to the wireless communications device in response to a checkout request from the wireless communications device; and

when a user at a wireless communications device has not logged-in to the wallet module, transmitting a log-in prompt from the wallet module to the wireless communications device in response to a checkout request from the wireless communications device.

7. (original) The method of claim 6, further comprising generating at the wallet module respective wallet session identifiers for the wireless session identifiers and associating

the wallet session identifiers with corresponding wireless session identifiers in a wallet session identifier table.

8. (original) The method of claim 7, further comprising, in response to a payment request from a wireless communications device, transmitting the payment request from the gateway module to the merchant application, disassociating the wireless session identifier from the corresponding merchant session identifier, and generating a new wireless session identifier for the wireless communications device when another initial request is received from the wireless communications device.

9. (original) The method of claim 8, further comprising clearing inactive entries from the wallet session identifier table.

10. (Currently amended) An apparatus for managing respective shopping sessions between wireless communication devices and a merchant application, comprising:

means for generating respective wireless session identifiers upon receipt of initial requests from the wireless communication devices and transmitting the wireless session identifiers to the merchant application;

means for associating the wireless session identifiers with corresponding merchant session identifiers received from the merchant application, wherein respective connections are established between the mobile communications devices and the merchant application; and

means for transmitting the merchant session identifier[[s]] that is [[are]] associated with the wireless session identifier[[s]] of the wireless device[[s]] to the merchant application in response to and in association with each subsequent communication[[s]] from ~~[[the]]~~ each wireless device[[s]] directed to the merchant application via the connection between the mobile device and the application program while the ~~[[respective]]~~ connection[[s]] between the mobile device[[s]] to the merchant application ~~[[are]]~~ is established ~~and for communications within the respective sessions.~~

11. (Currently amended) A system for managing respective sessions between mobile communication devices and an application program hosted on a data processing system, comprising:

a mobile interface configured and arranged to connect with a plurality of mobile communication devices;

a gateway coupled to the mobile interface and to the application program, the gateway configured to generate respective first session identifiers upon receipt of initial requests from the mobile communication devices, associate the first session identifiers with corresponding second session identifiers received from the application program, wherein respective connections are established between the mobile communications devices and the application program, and in response to each subsequent communication from each mobile device to the application program via the connection between the mobile device and the application program while the connection is established transmit the second session identifier[[s]] that is ~~is~~ ~~are~~ associated with the first session identifier[[s]] to the application program ~~in response to and associated with subsequent communications from the mobile devices to the application program while the respective connections between the mobile devices to the application program are established and for communications within the respective sessions.~~

12. (original) The system of claim 11, further comprising an authentication module coupled to the mobile interface and to the gateway, the authentication module configured to transmit a log-in prompt to a mobile device in response to a request of the first type from the mobile device.

13. (original) The system of claim 12, wherein the authentication module is further configured to generate respective authentication identifiers for the first session identifiers and associate the authentication identifiers with corresponding first session identifiers.